

I claim:

1. A window security means for a double hung casement window comprising:

5 (a) an elongated hollow tube having a first end and an opposite second end, and spaced apart tube apertures along a longitudinal axis of said elongated hollow tube,

(b) a piston means having a first end and an opposite second closed end having a central threaded bore, and spaced apart piston apertures
10 along a longitudinal axis of said piston means, said first end of said piston means being telescopically connected to said elongated hollow tube,

(c) an end cap having a threaded rod extended on an internal side of said end cap, said end cap is removably screwed inside said central threaded bore of said piston means, and

15 (d) a locking mechanism to interlock said elongated hollow tube and said piston means through said apertures.

2. The window security means of Claim 1 further comprising a pair of resilient feet, one of said feet being connected to said first end of said
20 elongated hollow tube, and another of said feet being connected to an external side of said end cap.

3. The window security means of Claim 1, wherein a length of said

window security means can be adjusted by telescopically moving said piston means along said longitudinal axis of said elongated hollow tube and interlocking said piston means and said elongated hollow tube with said locking mechanism.

5

4. The window security means of Claim 3, wherein said length of said window security means can be further adjusted by screwing in or out of said end cap inside said central threaded bore of said piston means.

10 5. A dual function window security means for a double hung casement window comprising:

(a) an elongated hollow tube having a first end and an opposite second end, and spaced apart tube apertures along a longitudinal axis of said elongated hollow tube,

15 (b) a hollow piston means having a first end and an opposite second end, and spaced apart piston apertures along a longitudinal axis of said piston means, said first end of said piston means being telescopically connected to said elongated hollow tube,

(c) a locking mechanism to interlock through said apertures said
20 elongated hollow tube and said piston means along said longitudinal axes, and

(d) an orientation sensor positioned inside said hollow piston means near said second end, wherein said orientation sensor activates and

generates an alarming signal when said dual function window security means is tilted a sufficient amount from a predetermined orientation.

6. The dual function window security means of Claim 5, wherein
5 said second end of said piston means is a closed end having a central threaded bore, and said window security means further comprises an end cap having a threaded rod extended on an internal side of said end cap, said end cap is removably screwed inside said central threaded bore of said hollow piston means.

10

7. The dual function window security means of Claim 6 further comprising an internal mounting bed aligned inside said hollow piston means for mounting said orientation sensor.

15 8. The dual function window security means of Claim 7, wherein said orientation sensor comprises a photo diode, a light receptor, an orientation sensitive blocking mechanism positioned between said photo diode and said light receptor, a power supply, a buzzer and a reset switch, connected on a circuitry board.

20

9. The dual function window security means of Claim 8, wherein said orientation sensitive blocking mechanism comprises a pair of rotor supports mounted on said circuitry board, a bladed vane having one weighted

blade and a central bore, said bladed vane being positioned between said rotor support and supported by said rotor supports through a rotor axis inserted through said central bore of said bladed vane,

wherein said bladed vane rotates around said rotor axis when said
5 dual function window security means tilts, which enables said light receptor to receive a light signal from said photo diode and activates said buzzer.

10. The dual function window security means of Claim 9, wherein said photo diode is positioned next to one of said spaced apertures of said
10 hollow piston means, which enables user to view said light signal emitted from said photo diode through aligned apertures of said hollow piston means and said elongated hollow tube, and to confirm a functioning status of said orientation sensor.

15 11. The dual function window security means of Claim 9, wherein said reset switch is a reset button, said hollow piston means and said elongated hollow tube have a pair of holes aligned with said reset button, and wherein said reset button can be reached through said holes.

20 12. The dual function window security means of Claim 11 further comprising a removable reset key which can press on said reset button through said holes to reset said orientation sensor.

13. The dual function window security means of Claim 12 further comprising an alignment means to secure said internal mounting bed in a position which enables alignment of said reset button with said holes.

5 14. The dual function window security means of Claim 13, wherein said predetermined orientation is one selected from the group consisting of an orientation with said longitudinal axes of said elongated hollow tube and said piston means in vertical position, and an orientation with said longitudinal axes of said elongated hollow tube and said piston means in horizontal
10 position.

15. A window security means for a double hung casement window comprising:

(a) a cylinder having an open end and an opposite close end, and
15 an air inlet and an air outlet along a side of said cylinder,

(b) a piston means having a first end and an opposite second end, and a sealing means around said piston means near said first end; said first end of said piston means being telescopically connected to said cylinder through said open end, wherein said sealing means provides a fluid tight
20 connection between said cylinder and said piston means, and

(c) a pair of resilient feet, one of said feet being connected to said close end of said cylinder, and another of said feet being connected to said second end of said piston means.

16. The window security means of Claim 15, wherein said sealing means is one selected from the group consisting of o-ring, grommet, and other air sealing means.

5

17. The window security means of Claim 15, wherein said air outlet has an air releasing mechanism, and said air inlet has an air sealing mechanism.

10 18. The window security means of Claim 15 further comprising a pneumatic pump for providing air into said cylinder.

15 19. The window security means of Claim 15, wherein a length of said window security means is adjustable along a longitudinal axis of said cylinder by adjusting air pressure inside said cylinder.

20. A method of securing a double hung casement window comprising the steps of:

- (a) positioning one window panel with a desired degree of opening,
- 20 (b) placing a window security means between an edge of said window panel at opposing side of said opening and a window sash facing said edge, said window security means comprising an elongated hollow tube, a piston means telescopically connected to said elongated hollow tube, a

length adjustment means, and an orientation sensor connected to said window security means, and

- (c) adjusting a length of said window security means equivalent to a distance between said edge of said window panel and said window sash,
- 5 thereby said window security means prevents further opening of said window,
- wherein said orientation sensor activates and generates an alarming signal when said dual function window security means is tilted a sufficient amount from a predetermined orientation.

10